

What is claimed is:

1. A method for fabricating a pattern in a mask on a surface of an object, comprising:

positioning a mask pattern including a plurality of mask lines at a first orientation with respect to said mask on said object;

imposing said mask pattern on said mask to create first mask lines extending in a first direction along said mask;

moving said mask pattern to a second orientation with respect to said mask on said object; and

imposing said mask pattern on said mask to create second mask lines extending in a second direction along said mask which is at an angle to said first direction and overlapping said first mask lines, such that said surface of said object is exposed at areas of said mask between said first and second mask.

2. A method as claimed in claim 1, further comprising:

removing portions of said object at said areas of said mask.

3. A method as claimed in claim 2, wherein:

said removing step removes said portions of said object to create openings in said object.

4. A method as claimed in claim 3, wherein:

at least one of said openings has a diameter within a range of about 1 nm to about 10 nm.

5. A method as claimed in claim 1, wherein:

said object include a semiconductor wafer, and said surface includes a surface of said semiconductor wafer.

6. A method as claimed in claim 1, wherein:
said second direction along said mask is transverse to said first direction.

7. A method as claimed in claim 1, wherein:
said imposing said mask pattern on said mask to create first mask lines
includes etching said mask to create said first mask lines.

8. A method as claimed in claim 1, wherein:
said imposing said mask pattern on said mask to create second mask lines
includes etching said mask to create said second mask lines.

9. A product manufactured by the process according to claim 1.

10. A product manufactured by the process according to claim 2.

11. A product manufactured by the process according to claim 3.

12. A product manufactured by the process according to claim 4.

13. A product manufactured by the process according to claim 5.

14. A product manufactured by the process according to claim 6.

15. A product manufactured by the process according to claim 7.

16. A product manufactured by the process according to claim 8.

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